

PATENT APPLN. NO. 10/056,209
RESPONSE UNDER 37 C.F.R. §1.111

**PATENT
NON-FINAL**

REMARKS

Claims 6, 11, 16, and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form. In view of this indication of allowability, claim 1 has been amended to include the limitations of claim 11 and claim 12 has been amended to include the limitations of claim 18. These amendments are equivalent to amending claims 11 and 18 in independent form. Claims 11 and 18 have been cancelled. The remaining claims depend, directly or indirectly, on claims 1 and 12 and, therefore, are also allowable.

Claims 3 and 14 are rejected under 35 U.S.C. §112, first paragraph. The position of the Office is that the specification, while being enabling for providing the columnar structure in the film when sputtering is employed, does not reasonably provide enablement for said columnar structure when the other claimed deposition methods are employed. Claims 4 and 19 are rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement. The position of the Office is that the specification does not enable a person of ordinary skill in the art to use a combination of the film forming methods recited in these claims.

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Reconsideration and removal of these rejections are respectfully requested. The Office has not properly supported its position. The enablement requirement of 35 U.S.C. § 112 requires that a specification provide sufficient teachings to enable a person of ordinary skill in the art (when combined with his own knowledge) to make and use the full scope of a claimed invention without undue, or excessive, experimentation. It is acceptable if some experimentation is required as long as it is not undue.

In the examples in the specification, thin films having a columnar structure were prepared using reactive deposition and ion beam-assisting reactive deposition methods, in addition to sputtering. (Refer to the description in the paragraph bridging pages 19 and 20). This is evidence that methods other than sputtering can be used to obtain thin films having the columnar structure without undue experimentation. The Office has not explained (as it must to support its position) why undue experimentation would be required to prepare thin films having a columnar structure using the other film-forming methods recited in claims 3 and 14.

Regarding the Section 112 rejection as it applies to claims 4 and 19, the film forming methods recited in these claims are well known in the art. It is also well known in the art that a thin

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film can be formed partway by a certain film forming method and then the remaining portion of the film can be formed by another film forming method. Therefore, a person skilled in the art could make a thin film by a combination of film forming methods without undue experimentation.

Removal of the 35 U.S.C. § 112, first paragraph, rejections is in order.

Claims 1, 4, 8, 9, 12 and 19 were rejected in the Action under 35 U.S.C. §102(b) as being anticipated by Ribes et al. ("Thin Films... for Li Microbatteries") ("Ribes"); claims 1, 2, 4, 5, 7-9, 12, 13, 15, 17 and 19 were rejected under 35 U.S.C. §102(b) as being anticipated by Sarradin ("Study of... batteries") ("Sarradin"); and claims 1-4, 8, 12-14 and 19 were rejected under 35 U.S.C. §102(b) as being anticipated by Ito ("K'- β -Ferrite...Secondary Battery") ("Ito"). Claim 10 was rejected under 35 U.S.C. §103(a) as being unpatentable over either Ribes as above or Sarradin as above in view of Tomiyama et al. (U.S. Patent No. 6,190,803) ("Tomiyama").

These rejections have been avoided by amending claims 1 and 12, as noted above, to include the limitations of claims 11 and 18, respectively, indicated in the Action to be allowable.

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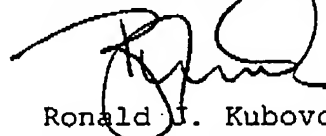
The foregoing is believed to be a complete and proper response to the Office Action dated May 28, 2004, and is believed to place this application in condition for allowance. If, however, minor issues remain that can be resolved by means of a telephone interview, the Examiner is respectfully requested to contact the undersigned attorney at the telephone number indicated below.

In the event that this paper is not considered to be timely filed, applicants hereby petition for an appropriate extension of time. The fee for any such extension may be charged to our Deposit Account No. 111833.

In the event any additional fees are required, please also charge our Deposit Account No. 111833.

Respectfully submitted,

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